

FEDORTSOV, Boris Fedorovich; KOTOV, P.A., prof., retsenezent; ZELIGER,
N.B., prof., retsenezent; BERGMAN, F.Ya., red.; SOBOLEVA,
Ye.M., tekhn.red.

[Phototelegraphy] Fototelegrafiia. Moskva, Gos.energ.izd-vo,
1960. 354 p. (MIRA 13:5)
(Phototelegraphy)

24852

S/106/60/000/004/007/007
A055/A133

6.7100

AUTHOR: Zeliger, N. B.

TITLE: Criteria for the estimating of the quality of telegraph transmission

PERIODICAL: Elektrosvyaz', no. 4, 1960, 62 - 71

TEXT: The author describes the fundamental criteria for the estimating of the reliability of telegraph communication, viz 1) the degree of start-stop distortion (such as it was defined by the International Telegraph and Telephone Consultative Committee) and the degree of general distortion; 2) the phase-range at reception; 3) the margin of telegraphic apparatuses, and 4) the margin of stability of telegraph communication. Start-stop distortions. - The author explains how start-stop distortions arise and briefly discusses formulae.

$$\delta_{stst} = \frac{|t_n - t_x|_{\max}}{t_0} \quad (1)$$

and

$$\delta_{stst} = \frac{|\Delta t_n - \Delta t_x|_{\max}}{t_0} \quad (2)$$

Card 1/4

24852

S/106/60/000/004/007/007
A055/A133

Criteria for the estimating of the quality of...

measuring the degree of start-stop distortions. He describes the principle of start-stop distortion measurement with the aid of the cathode-ray tube. "Phase-adjuster" range ("Diapazon Fazoustanovitelya") and optimum moment of registration. - The general definition of the "phase adjuster" range is followed by the reproduction of the fundamental formulae determining this range and the optimum moment of registration of the sending. Margin μ_{stst} . - The author explains the measuring of the margin and emphasizes that it is one of the most important criteria. After reproducing formula

$$\mu = \frac{\theta}{t_0}$$

(9)

used for measuring the margin of start-stop apparatuses (θ being the boundary value of start-stop distortion), he speaks of the theoretical, the effective and the nominal margin, such as they were defined by the C.C.I.T.T (see English-language reference). Relationship existing between the "phase adjuster" range, on the one hand, and the margin of the apparatus and the margin of stability of communication, on the other. - The turning of the "type-setting muff" ("nabornaya mufta") through angle φ_s corresponds to the "phase adjuster" range. The relationship between the "phase adjuster" range and the margin is

Card 2/4

24852

Criteria for the estimating of the quality of...

S/106/60/000/004/007/007
A055/A133

$$\mu_{stst} = \frac{\varphi_s^0}{12t_0n_0} \quad (20)$$

where $\varphi_s^0 = \frac{180}{\pi} \varphi_s$, and n_0 is the angular velocity of the muff (rpm). When distorted sendings reach the electromagnet of the apparatus, the "phase adjuster" range decreases from its maximum value φ_s^0 to φ_x^0 . The higher the distortion degree, the smaller is φ_x^0 . The range φ_x^0 characterizes the margin of stability m of telegraph communication. The relationship between m and the degree of start-stop distortion is briefly discussed by the author. General distortions. - After explaining the fundamental difference between the start-stop and the continuously rotating apparatus, the author mentions the conception of the degree of the general or isochronous distortion of telegraph sendings, - a conception introduced by the C.C.I.T.T. for estimating the quality of the performance of continuously rotating telegraph apparatus. Speaking of this distortion, he reproduces, for instance, the following formula allowing to measure it:

$$\delta_{gen} = \frac{t_{max} - t_{min}}{t_0} \quad (23)$$

where t_{max} is the maximum value of the delay in the reproduction of one of the

Card 3/4

24852

S/106/60/000/004/007/007
A055/A133

Criteria for the estimating of the quality of...

boundaries between sendings of a given series, and t_{\min} is the minimum value of the delay in the reproduction of the other boundary between sendings of the same series. Measurement of general distortion. - The author briefly explains the measuring principle of general distortion by the stroboscopic method. Margin μ_{gen} . - For measuring the margin of apparatuses where the distortion of corrective sendings does not provoke the shift of registration moments (or of apparatus where these shifts can be neglected), the author cites the following formula

$$\mu = \frac{\theta_{\text{gen}}}{2t_0} \quad (25)$$

The presence of unilateral distortion and of bilateral distortion are briefly examined. At the end of the article, the author states that the existing experimental data do not allow to establish any regular relationship between the degree of general distortion and the degree of start-stop distortion. There are 10 figures and 7 references: 5 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: "International Telegraph and Telephone Consultative Committee (C.C.I.T.T.)". Documents of the VIIIth plenary assembly, Geneva, 1956. International Telecommunication Union, February 1957.

SUBMITTED; November 2nd, 1959

Card 4/4

ZELIGER, N.B.

Criterion for evaluating the quality of telegraph transmission.
Elektrosviaz' 14 no.4:62-71 Ap '50. (MIRA 13:6)
(Telegraph)

ZELIGER, Naum Borisovich; TOMASHEVSKIY, B.A., otv. red.; KIRILLOV, L.M.,
red.; MARKOCH, K.G., tekhn. red.

[Course on telegraphy] Kurs telegrafii. Moskva, Gos. izd-vo lit-
ry po voprosam svyazi i radio. Pt.1. [Principles of telegraphy
and teletype apparatus] Osnovy telegrafii i startstopnye tele-
grafnye apparaty. 1961. 198 p. (MIRA 14:8)
(Telegraph)

VITENBERG, Moisey Izrailevich; ZELIGER, N.B., prof., retsenzent;
ARONOVICH, B.I., dots., retsenzent; USSEH, A.S., red.; SOBOLEVA,
Ye.M., tekhn. red.

[Design of electromagnetic relays for automatic control and communication apparatus] Raschet elektromagnitnykh rele dlia apparatury avtomatiki i svyazi. Izd.2., perer. i dop. Moskva, Gos. energ.izd-vo, 1961. 704 p. (MIRA 15:1)
(Electric relays)

ZELIGHER, RIRI

RUMANIA/Analysis of Inorganic Substances

G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19564

Author : Marta Stan Suciu, Riri Zeligher

Inst : C. J. Parhon University

Title : Application of Ascorbic Acid to Volumetric Determination of Tin.

Orig Pub: An. Univ. "C. J. Parhon". Ser. Stiint. Natur., 1956, No 10, 39 - 50.

Abstract: Sn is eliminated from the solution by reducing it with metallic Al or Zn; the metallic Sn is dissolved in HCl, then the ion Sn^{2+} is oxidized by an excessive quantity of titrated FeCl_3 solution and boiling, the titer having been determined using the ascorbic acid (determined with iodine) at 60° and pH 1 in presence of KSCN as of an indicator.

Card 1/1

- 44 -

S/117/60/000/012/003/022
A004/A001

AUTHOR: Zeligman, L. D.

TITLE: Using Glue Instead of Zinc

PERIODICAL: Mashinostroitel', 1960, No. 12, p. 16

TEXT: The Central Laboratory of the Yaroslavskiy zavod "Proletarskaya svoboda" (Yaroslavl' "Proletarskaya svoboda" Plant) carried out a series of tests to investigate the substitution of zinc coatings by the BAY-3 (VDU-3) glue. This glue grade is a benzene-acetone or benzene-toluene-acetone-ethylacetate solution of the synthetic VDU resin with nitrile resin mixtures. It is used for the vulcanization of nitrile or "sevanite" resin mixtures to metallic armature and as anti-corrosion coating for the protection from the effects of fumes and acids. The metal surface has to be carefully cleaned and degreased. The glue is produced in the following way: Finely cut pieces of the VDU elastomer (20 parts by weight) are placed in a dry clean vessel, into which the solvent (80 parts by weight) is poured. The mixture is left to swell for 8-10 hours, after which it is stirred periodically to obtain a homogeneous mass. The solvent is composed of acetone (50 parts by weight), ethyl or butylacetate (35 parts by weight) and benzene or toluene (15

Card 1/2

Using Glue Instead of Zinc

S/117/60/000/012/003/022
A004/A001

parts by weight). To test the anticorrosion film, the VDU-3 glue was applied to heaters. The first coat was applied by dipping the heaters into the glue, then they were held in the air for 30 minutes. The second coat was applied in the same way. Then the heaters were held in the air for 2 hours with subsequent drying at temperatures in the range of 140 - 143°. The temperature was increased and reduced slowly. To check the stability of the coat the heater was placed in a drier for 2 hours. No changes of the glue coat could be observed. Tests were carried out to determine the heat-transfer coefficient of heaters with different coatings. It was found as a result of the data obtained that, as to heat-transfer, glue-coatings yield better results than zinc coatings. During solidification the glue does not evolve volatile products. The VDU-3 glue coating is characterized by a high hardness and mechanical strength, possesses a high chemical durability, good adhesion and high resistance against the effects of acids, alkali, water and gasoline. ↓

Card 2/2

ZELIGMAN, I.D.

Epoxy resin binders. Lit.proizv. no.7:37 Je '60. (MIRA 13:7)
(Foundries--Equipment and supplies)
(Binding materials)

ZELIGMAN, L.N. [Zelihan, L.N.]; ZAMYATIN, Yu.V. [Zam'iatin, IU.V.]

Ampoules for repeated use in the manufacture of plastic
scintillators. Khim. prom. no.4:75-76 O-D '64. (MIRA 18:3)

LETOPIS' N. 1.

23249 Por'ba s vrednymi vydeleniyami na metallurgicheskikh i zhiricheskikh
predpriyatiyakh. Trud: zhar'k. Khim.-tekhrol, Khim.-tekhrol. In-ta.
Im. Kirova, vyp. 7, 1949, c. 201-04.-Bibliogr: 5 Nazy.

SO: LETOPIS' N. 31, 1945

ZELIGMAN, N.A. dataant.

Kharkov Branch of the D.I. Mendeleev All-Union Chemical Society,
Khim. nauka i prom. 2 no.3:388-390 '57. (MIRA 10:8)
(Kharkov--Chemical societies).

Zeligman N. A.

68-58-2-13/21

AUTHORS: Belov, K.A., Doctor of Technical Sciences and
Zeligman, N.A., Candidate of Economic Sciences

TITLE: On the Problem of the Choice of Method of Purification
of Gas from Hydrogen Sulphide in Coke Oven Works Situated
in the Southern USSR (K voprosu o vybore metoda ochistki
gaza ot serovodoroda na koksokhimicheskikh zavodakh yuga
SSSR)

PERIODICAL: Koks i Khimiya, 1958, Nr 2, pp. 52 - 53 (USSR)

ABSTRACT: This is a contribution to the discussion on the problem
on the pages of this journal (1957, Nr 5, pp 47-50 and Nr 6,
pp 48 - 51). The present authors pointed out that the
opposite conclusions as to the cost of cleaning gas by vacuo-
carbonate and arsenical methods reached by the authors of
previous papers is due to the different approach of the
respective authors to the analysis and interpretation of
reported data, which underlines the necessity of considering
costs taking into consideration local conditions. The authors
consider the vacuo-carbonate method as the simpler one and
cheaper in operation, but this does not exclude the possibility
that under certain conditions the arsenical method can be more
advantageous.

Card1/2

68-58-2-13/21

On the Problem of the Choice of Method of Purification of Gas from
Hydrogen Sulphide in Coke Oven Works Situated in The Southern USSR

ASSOCIATION: Khar'kovskiy politekhnicheskii institut imeni
V.I. Lenina (Kharkov Polytechnical Institute
imeni V.I. Lenin)

AVAILABLE: Library of Congress

Card 2/2 1. Gases - Purification 2. Hydrogen sulfide -
Elimination 3. Coal gas - Purification

ZELIGMAN, N.A.

Economics of the comprehensive utilization of brown coals in
the U. S. S. R. Trudy KhPI #2 no.2:99-101 '59. (MIRA 1959)
(Dnieper Basin--Lignite)

ZELIGMAN, N.A.

Conference on the utilization of Shebelinka gas and construction
of a chemical combine. Ukr. khim. zhur. 27 no.4:546-547 '61.
(MIRA 14:7)
(Shebelinka region--Gas, Natural)

ATROSHCHENKO, V.I., doktor tekhn.nauk; ZELIGMAN, N.A., kand.ekonom.nauk

Contribution of Khar'kov chemists to the chemization of the country.
Zhur. VKHO 9 no. 3:342-345 '64. (MIRA 17:9)

ZELIGMAN, S.B.

USSR / Human and Animal Morphology (Normal and Pathological).
Skeleton.

S

Abs Jour : Ref Zhur - Biol., No 21, 1958, No 97143

Author : Zeligman, S.B.
Inst : Stalino Medical Institute
Title : The Growth and Aging Peculiarities of the Cricoid
Cartilage of the Human Larynx.

Orig Pub : Tr. Stalinskogo med. in-ta, 1957, 10, 147-158

Abstract : It was shown in 2,155 human cricoid cartilages (CC) at ages of 3-month-old intra-uterine development to 80 years (1,289 male and 866 female) that the relationship of the heights of the lamina of CC to its width is, on the average, always less than one. In embryogenesis, the lamina of CC is square; to 1½ years of age - trapezoidal; to 20 years of age - hexagonal. The angles of the lamina are more sharply expressed in men than in women; in the former, the growth

Card 1/2

USSR / Human and Animal Morphology (Normal and Pathological).
Skeleton.

S

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of the lamina in height and width usually occurs at different times; in the latter, at the same time. With aging, the relative height of the arc of CC becomes smaller than the height of its lamina. Projection of the CC arc on the lamina is not constant, is connected with age and sex, and depends on the character of development of the first tracheal ring and other circumstances. The form of the CC arc depends on the character and strength of interaction of the musculature connected with it. Anomalous fusions of the CC arc with the tracheal ring are encountered.

Card 2/2

ZELIGMAN S. B.

USSR / Human and Animal Morphology - Respiratory Tract. 8
Abs Jour : Ref. Zhur. - Biol., No. 22, 1958, No. 101435
Author : Zeligman, S. B.
Inst : Stalin Medical Institute
Title : The Histostructure of the Cricoid Cartilage of
the Human Larynx in Ontogenetic Growth.
Orig Pub : Tr. Stalinskogo med. in-ta, 1957, Vol.10, 159-168
Abstract : In 193 human larynges from cadavers ranging in
age from 3 months of intra-uterine life to 80 years,
the processes of change in the structure of the
cricoid cartilage (CC) were described. In the ini-
tial period of intra-uterine existence, the CC
characteristically shows a whorled distribution
of cells. The microscopic pictures of the CC and
of the thyroid cartilage are different. In the
development of the CC a greater place is occupied

Card 1/2

EXCERPTA MEDICA Sec 11 Vol 12/5 C.R.L. May 59

943. THE ROLE OF THE SEXUAL GLANDS IN OSSIFICATION OF LARYNGEAL CARTILAGES (Russian text) - Zeligman S. B. - PROBL. ENDOKR. 1958, 4/3 (55-59) Tables 1 Illus. 2

Analysis of roentgenographical data of the larynxes in 2 groups of animals, i.e. castrated and with intact sexual glands, demonstrated that the latter had an effect on the natural process of ossification of laryngeal cartilages by activating this process. In castrated animals this process is either delayed or arrested depending on the age when the sexual glands were removed. Analogous results were obtained in examination of women with complete or partial infantilism.

DOVGIALLO, N D., ZELIGMAN, S.B.

History of the Department of Normal Anatomy at the Gor'kii
Medical Institute in Stalino. Arkh.anat.gist. i embr. 35 no.
3:98-100 My-Je '58 (MIRA 11:7)

1. Adres avtorov: Stalino (Donbass), Kalinovka, Makeyevskoye
shosse. Meditsinskiy institut, kafedra normal'noy anatomii.
(STALINO--ANATOMY--STUDY AND TEACHING)

ZELIGMAN, S.B.

Role of gonads in ossification of the laryngeal cartilages [with summary
in English]. Probl.endok., 1 gorm. 4 no.3:55-59 My-Je '58 (MIRA 11:8)

1. Iz kafedry anatomii (zav. prof. N.D. Dovgynallo) Stalinskogo
meditsinskogo instituta (dir. - dotsent A.M. Ganichkin).

(LARYNGEAL CARTILAGES, physiology
ossification, eff. of castration (Rus))

(CASTRATION, effects,
on laryngeal cartilage ossification (Rus))

ZELIGMAN, S.B., dots (Stalino)

Projection of the vocal cords to the thyroid cartilage in man [with summary in English]. Vest.oto.-rin. 20 no.4:66-67 J1-Ag '58 (MIRA 11:7)

1. Iz kafedry normal'noy anatomii (zav. - prof. N.D. Dovgyallo)
Stalinskogo meditsinskogo instituta.

(VOCAL CORDS, anat. & histol.

projection of vocal fold to thyroid cartilage (Rus))

(LARYNGEAL CARTILAGES, anatomy and histol.

(same)

ZMLIOMAN, S.B.

Age changes and sexual peculiarities in the large cartilages of
the human larynx (radiographic and anatomical investigation).
Sud.-med.ekspert. 2 no.2:6-16 Ap-Je '59. (MIRA 13:6)

1. Kafedra normal'noy anatomii (zav. - prof. N.D. Dovgyallo)
Stalinskogo meditsinskogo instituta.
(LARYNX)

ZELIGMAN, S.B.; BELYKH, G.A. [Bielykh, H.A.]

Content of certain trace elements (Si, Al, Mn, Cu) in the skeleton
of the human larynx, as related to the chronological development.
Ukr.biokhim.zhur. 31 no.6:868-876 '59. (MIRA 13:5)

1. Department of Normal Anatomy and Department of Biological
Chemistry of the Stalino Medical Institute.
(LARYNX)

ZELIGMAN, S.B. (Stalino (Donbass), bul'var Pushkina, d. 25, kv.28)

Age changes in the histostructure of the thyroid cartilage in man.
[with summary in English]. Arkh.anat.gist. 1 embr. 36 no.2:43-51
F '59. (MIPA 12:4)

1. Kafedra normal'noy anatomii (zav. - prof. N.D. Dovgyallo)
Stalinskogo meditsinskogo instituta.
(LARYNGEAL CARTILAGES, anat. & histol.
thyroid cartilage, histol., age factor (Rus))
(AGING, effects,
on thyroid cartilage histol. (Rus))

ZELIGMAN, S.B. (Stalino (Donbass), bul'var Pushkina, 25, kv. 28)

Calcification and ossification of the thyroid cartilage of the
larynx in mar; X-ray study, Arkh.anat.gist.i, embr. 39 no.9:97-
102 S '60. (MIRA 14:1)

1. Kafedra normal'noy anatomii (zav. - prof. N.D.Dovgyallo)
Stalinskogo meditsinskogo instituta.
(LARYNX) (CALCIFICATION)

ZELIGMAN, S.B., dotsent

Structure of the arytenoid cartilages of the human larynx at
different ages. Zhur. ush., nos. 1 gorl. bol. 20 no. 3:45-48
My-Je '60. (MIRA 14:4)

1. Iz kafedry normal'noy anatomii (zav. - prof. N.D. Dovgyallo)
Stalinskogo meditsinskogo instituta.
(LARYNX)

ZELIGMAN, S.B. (Stalino (Donbass), bul'var Pushkina, 25, kv.28)

Age-related changes in the histological structure of the
laryngeal thyroid cartilage in mah. Arkh. anat. gist.1
embr. 40 no.3:82-87 Mr '61. (MIRA 14:5)

1. Kafedra normal'noy anatomii (zav. - prof. N.D.Dovgyallo)
Stalinskogo meditsinskogo instituta.
(LARYNX) (CARTILAGE)

GINZBERG, V.V. (Leningrad, F-121, ul. Pisareva, 14, kv. 7); ZELIGMAN, S.B.
(Stalino (Donbass), Bul'var Pushkina, 25, kv. 28)

N.P. Gundobin (1860-1908) -- the founder of growth anatomy;
on the 100th anniversary of his birth. Arkh. anat. gist.
i embr. 41 no. 8: 101-107 Ag '61. (MIRA 15:6)

1. Leningradskoye otdeleniye Instituta etnografii AN SSSR
i kafedra normal'noy anatomii (zav. -- prof. N.D. Dovgyallo)
Stalinskogo meditsinskogo instituta.

(GUNDOBIN, NIKOLAI PETROVICH, 1860-1908)
(ANATOMY, HUMAN)

ZELIGMAN, S.B., prof.

Correlated morphological characteristics of the human
laryngeal skeleton with respect to age. Zhur. ush., mos.
i gorl. bol. 23 no.1:66-69 Ja-F '63. (MIRA 17:2)

1. Iz kafedry normal'noy anatomii (zav. - prof. N.D. Dovgyallo)
Donetskogo meditsinskogo instituta.

ZELIGMAN, S.B. (Donetsk (Donetskiy Basseyu), Bul'var Fushkina, 25, kv.28)

Growth of human vocal cords. Arkh. anat. gist. i embr. 45 no.11:
88-92 N '63. (MIRA 17:8)

1. Kafedra normal'noy anatomii (zav. - prof. N.D. Dovgyallo)
Donetskogo meditsinskogo instituta.

ZELIGMAN, S.B.
VLASYUK, P.A., otvetstvennyy red.; VASILENKO, A.A., red.; YURNINCHUK, F.F.,
kand.sel'skokhozyaystvennykh nauk, red.; ZELIGMAN, S.B., kand.
tekhn.nauk, red.; KUKHARENKO, N.I., kand.biol.nauk, red.;
MULYARSKIY, B.Ya., red.izd-va; SIVACHENKO, Ye.K., tekhn.red.

[Improving techniques of using fertilizers] Usovershenstvovanie
tekhniki vneseniya udobrenii. Kiyev, 1955. 255 p. (MIRA 11:6)

1. Akademiya nauk URSR. Kiyev. Rada po vyvcheniyu produktivnykh
nil URSR. 2. Deyatvitel'nyy chlen Akademii nauk USSR i Vsesoyuznoy
akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Vlasyuk)
3. Deyatvitel'nyy chlen Akademii nauk USSR (for Vasilenko)
(Fertilizers and manures)

ZELIGMAN, S.B., kand. tekhn. nauk; BABIY, P.T., inzh.

Mechanized field grain-cleaning barns. Mekh. sil'. hosp. 9
no. 6:5-6 Je '58. (MIRA 11:7)
(Ukraine--Grain--Cleaning)

ZELIGMAN, S.B. [Zelikhman, S.B.], kand.tekhn. nauk; BABIY, P.T. [Babii, P.T.],
inzh.

Sizing sunflower seeds. Mekh. sil'. hos. 9 no.4:15-16 Ap '58.
(MIRA 11:5)

(Sunflowers) (Seed industry)

ZELIGMAN, S.B.

BABUK, V.B.; ZELIGMAN, S.B., kand.tekhn.nauk

Theory of the diagonal moving of the checkwire. Mekh. i elk. sots.
sel'khoz. 15 no.2:12-17 '58. (MIRA 11:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanizatsii i
elektrifikatsii sel'skogo khozyaystva. 2. Chlen-korrespondent
Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.
Lenina (for Babuk).
(Planters (Agricultural machinery))

VASILENKO, A.O. [Vasylenko, A.O.], doktor tekhn.nauk; ZELIGMAN, S.B.
[Zelihman, S.B.], kand.tekhn.nauk

Sugar beet harvesting machines abroad. Mekh. sil'. hosp.
11 no.10:29-31 0 '60. (MIRA 13:9)
(Sugar beets--Harvesting)

ZELIGMAN, S.B.; DOVINER, D.G.

Plenary Session and Conference of Ukrainian Scientific Society of
anatomists, histologists and embryologists. Arkh.anat.gist. i embr.
48 no.3:126-128 Mr '65. (MIRA 18:6)

~~ZELIGOWSKA-SZULC, J.~~

Allergic reaction of the hemopoietic system during application of sulfonamides. *Pediat. polska* 28 no.7:671-684 July 1953. (CLML 25:4)

1. Of the Diagnostic Pediatric Clinic (Head--Prof, Z. Lejmbach, M.D.) of Warsaw Medical Academy.

EXCERPTA MEDICA Sec. 7 Vol. 9/9 Sept. 55

Zeligowska-Szulc, J.

1942. ZELIGOWSKA-SZULC J., KANSY J., SZULC A. and ZALEWSKA I. Klin. Diagn. Chor. Akad. med., Warszawa. *Klinika lambliaz u dzieci na podstawie własnego materiału. Description of the clinical features of lamblasis in children based on personal material PEDIAT. POL. 1954, 29/8 (763-777)

Thirty-two cases in children aged 4-15 yr. were divided into 4 types: (1) duodenal (2) pseudo-ulcerous, (3) hepatic, (4) dyspeptic. There were characteristic symptoms for each type with features common to all of them. Division into groups was based on the case history, duodenal tube and X-ray findings. The hepatic group was the most numerous one (19 cases) showing inflammatory changes of the bile. The most serious symptoms were noted in the pseudo-ulcerous group. Treatment consisted in administering atabrine thrice with 4-week intervals. In all children there was considerable improvement of the general state of health, increase in weight, return of appetite and disappearance of excessive psychical sensitivity. In the pseudo-duodenal group vomiting was arrested and in the dyspepsia group loose stools disappeared. In only 50% of the cases of the hepatic group the inflammatory changes in the biliary tract subsided. Gastric hypoacidity was noted in 26 out of 32 cases. It did not disappear after complete recovery from lamblasis. Functional disorders of the pancreas were not noted. Authors (XX, 1)

XX
ZELIGOWSKA-SZULC J.

EXCERPTA MEDICA Sec.6 Vol.11/3 Internal Med. Mar 57

1486. ŻELIGOWSKA-SZULC J. Klin. Diagn. Chor. Dziecięcych A.M., Warsza-
wa. *Zakażenie pałeczką Pasteurella u ludzi. Human infection with
a Pasteurella bacillus POL.TYG.LEK. 1956, 11/18 (799-801)

Description of an acute, febrile and fatal infection in a 12-year-old girl. Among
the symptoms, the haemorrhagic tendency: epistaxis, petechiae, s.c. haemo-
rrhages, predominated. Pasteurella multocida was obtained from patient's
blood in culture. Antibiotic treatment with streptomycin, chlortetracycline,
penicillin had no effect on the course of the disease.

Anigstein - Galveston, Tex. (XX, 7, 6)

ZELIGOWSKA-SZULC, Janina (Warszawa)

Observations on the clinical picture of helminthiases in children and therapeutic results according to data of the pediatric helminthological clinic in Warsaw. Wiadomosci parazyt., Warsz. 2 no.5:Suppl:127.1956.

1. Poradnia Helmintologiczna.
(HELMINTH, statistics,
in Poland (Pol))

ZELIGOWSKA-SZULC, Janina

Pasteurella infection in humans. Polski tygod. lek. 11 no.18:
799-801 30 Apr 56.

1. Z Kliniki Diagnostyki Chorob Dziecięcych A.M. w Warszawie;
kierownik prof. dr. Z. Lejmbach. Warszawa, ul. Działdowska 1,
Klinika Diagnostyki Chorob Dziec.

(PASTEURELLA, infections,
in humans (Pol))

ZELIGOWSKA-SZULC, Janina

Clinical picture and results of helminthiasis therapy on the basis of observations made by Helminthological Dispensary. Pediat. polska 32 no.2:113-130 Feb 57.

1. Kierownik poradni: dr. M. Zeligowska-Szulc. Adres: Warszawa, ul. Dzialdowska 1/3.

(HELMINTH INFECTIONS, in inf. & child
clin. manifest. & ther. (Pol))

ZELIGOWSKI, Henryk

GAWINSKA-OSTROWSKA, Janina; ZELIGOWSKI, Henryk

Case of Laurence-Moon-Bardet-Biedl syndrome. Polski tygod. lek.
9 no.47:1521-1523 22 Nov 54.

1. Z II Kliniki Chor. Wewn. A.M. w Lodzi; kier. prof. dr med.
J. Jakubowski.

(LAURENCE-MOON-BIEDL SYNDROME,
case rep

JAKUBOWSKI, Jerzy; ZELIGOWSKI, Henryk

Attempted cytologic diagnosis of gastric cancer. Polski tygod. lek.
9 no.47:1510-1513 22 Nov 54.

1. Z II Kliniki Chor. Wewn. A.M. w Lodzi: kier. prof. dr J.Jakubowski.
(STOMACH, neoplasms,
diag., cytol.)

~~ZELIGOWSKI, Henryk~~

JAKUBOWSKI, Jerzy: ~~ZELIGOWSKI, Henryk~~

Arrhythmia and its role in the development of circulatory insufficiency.
Polski tygod. lek. 9 no.49:1567-1569 6 Dec 54.

1. Z II Kliniki Chor. Wewn. A.M. w Lodzi; kier. prof. Dr J.Jakubowski.
(ARRHYTHMIA, complications,
circ. disord.)
(BLOOD CIRCULATION, diseases,
disord. caused by arrhythmia)

ZELIGOWSKI, Henryk

Problem of heart diseases in medical consultation in athletics. Polski tygod. lek. 11 no.24:1067-1069 11 June 56

1. Z II Klin. Chor. Wew. A. M. w Lodzi; kier. prof. dr med. J. Jakubowski
(HEART DISEASE,
in athletes, med. aspects (Pol))
(ATHLETICS, diseases,
heart dis., med. aspects (Pol))

ZELIGOWSKI, Henryk. (Warszawa ul. Grojecka 66 m 47.)

Value of cytological examination of stomach scrapings for early diagnosis of cancer of the stomach. Polski tygod. lek. 13 no.35:1349-1355
1 Sept 58.

1. Z II Kliniki Chorob Wewnętrznych A. M. w Łodzi; kierownik: prof. dr med.
J. Jakubowski.

(STOMACH NEOPLASMS, diag.

cytol. exam of stomach scrapings, value (Pol))

WIELICZANSKI, Henryk; ZELIGOWSKI, Henryk

Late syphilis of the liver. Polski tygod. lek. 13 no.50:2026-2028 15
Dec 58.

1. Z II Kliniki Chorob Wewnętrznych A. M. w Łodzi; kierownik: prof. dr
nauk med. Jerzy Jakubowski. Adres: II Klinika Chorob Wewnętrznych A. M.
w Łodzi, ul. Sterlinga 1/3.

(SYPHILIS, case reports
liver, late syphilis (Pol))

(LIVER DISEASES, case reports
syphilis, late (Pol))

ZELIGOWSKA, IRENA

KUBERSKI, Zdzislaw, Lodz, Armii Czerwonej 15; ZARZYCKA, Helena;
ZELIGOWSKA, Irena

Guillain-Barre syndrome in children. Pediat. polska 29 no.11:
1071-1088 Nov 54.

1. Z II. kliniki chorob dziecięcych Akademii Medycznej w Łodzi
Kierownik: prof. dr. med. Fr.Redlich. Z kliniki chorob nerwowych
Akademii Medycznej w Łodzi. Kierownik: prof. dr. med. E.Herman.
(GUILLAIN-BARRE SYNDROME, in infant and child)

ZELIGOWSKA, Irena

ZELIGOWSKA, Irena (Lodz, Armii Czerwonej 15)

Observation on the nursery for infants with whooping cough in
Lodz. Pediat. polska 29 no.3:312-314 Mr '54.

1. Z II. Kliniki Chorob Dzieciacych Akademii Medycznej w Lodzi.
Kierownik: prof. dr med. Fr. Redlich.
(WHOOPING COUGH, prevention and control,
*Poland)

SEREJSKA, Ewa; ZELIGOWSKA, Janina

Central nervous system complications in Schoenlein-Henoch
syndrome. Pediat. Pol. 39 no.2:175-178 1964

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie;
kierownik: prof. dr. med. Z. Lejmbach

PROCESSING AND PROPERTY INDEX																									
1ST AND 2ND COLUMNS													3RD AND 4TH COLUMNS												
<p><i>Phytin and the methods of its preparation. N. E. Zelitskaya. Trans. Sci. Chem. Pharm. Inst. (Moscow) No. 23, 4-81 (in German RZ-3)(1930).--A monograph consisting of a review of the literature, a restatement of the most reliable methods for the estimation of the constituent element of phytin and a description of a new method for the double combustion of C. A new method is offered for the estimation of the mineral phosphoric acid in phytin by precipitation with molybdic acid in the cold. The following details were made: total phosphoric acid, mineral phosphoric acid, phosphoric acid added to phytin previously freed from mineral phosphates, phosphoric acid in organic combination, C and H, bases (Ca and Mg, Na and K, NH₄), Fe and Mn, Na and moisture. Analysis of several samples of phytin and a study of the Ba, Ca, Na, strychnine and borax salts of inositol phosphoric acid were made. Inositol hexaphosphomolybdic acid was given</i></p> <p><i>A. citrinus L., C. citrinus Pries and Rustulavivensis Schaft was obtained by pressing and the Δ detid. The Δ varied from species to species: it varied during the development of the reproductive cells and decreased during maturation and when aged. it was not equal in all parts of the same fungus.</i></p> <p><i>PETER MANUCCI</i></p>																									
<p>ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

1ST AND 2ND ORDERS		BRANCHES AND PROPERTIES INDEX		3RD AND 4TH ORDERS	
CA		<p>Determination of quinine alkaloids which do not contain a methoxyl group in a mixture of quinine alkaloids. N. E. Zeligson and A. K. Sin'kovskaya (All Union Chem. Pharm. Inst., Moscow). <i>J. Gen. Chem. (U.S.S.R.)</i> 15, 957-61 (1946).--The detn. of MeO-free quinine alkaloids is based on catalytic hydrogenation, followed by cleavage of MeO groups by boiling with HCl and treatment with alkali; extn. with Et₂O or CHCl₃ gives hydrocinchonine and hydrocinchonidine which are detd. acidimetrically. The hydrogenation is done in the presence of H₂SO₄-Pd in 10% HCl.</p> <p>G. M. Kozlovskii</p>		17	
ASD-31A METALLURGICAL LITERATURE CLASSIFICATION					
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COMMON ELEMENTS										PRICE: 165 AND PROPERTIES INDEX										125 AND 175 INDEX									
<p>CA</p> <p>Quinine dihydrochloride. N. R. Zeligson and V. V. Kolpakov. U.S.S.R. 67,919, Feb. 23, 1947. Quinine or its salt is shaken with HCl, a soln. of NaCl, and CHCl_3. The product is allowed to settle out and quinine-2HCl is pptd. from the CHCl_3 layer with Me_2CO. M. H.</p>																				17									
<p>ASM-A1 METALLURGICAL LITERATURE CLASSIFICATION</p>																													
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Quinine dihydrochloride. N. K. Zelgson and V. V. Kolpakova. U.S.S.R. 69,946, Dec. 31, 1947. Dissolve quinine-HCl in CHCl_3 . The H_2O of crystn. separates as top layer. Remove the bottom layer, add a calcd. quantity of concd. HCl and shake. The liquid separates into 2 layers, the lower being excess CHCl_3 . Collect top layer and in it ppt. quinine dihydrochloride with MgCO_3 .
M. Hosen

CA

Quinine alkaloids. N. B. Zeligson and V. V. Kolpakova (S. Onitschikids; Chem. Pharm. Inst., Moscow). *Zhur. Priklad. Khim.* 21, 323-31(1961); *J. Applied Chem. (U.S.S.R.)* 24, 357-65(Engl. translation).—Quant. sepn. of the 8 main quinine-group alkaloids can be done only by group reactions: the Thron-Drscher method (C.A. 29, 2172¹) for sepn. of vinyl and Et deriva., and the Zeligson-Sin'kovskaya method (C.A. 40, 3754²) for isolation of MeO-free alkaloids. The MeO-contg. alkaloids are converted to *hydrocupreine* and *hydrocupreidine*; combining both methods yields the above mixt. and that of *hydrocinchonine* with *hydrocinchonidine*; the latter is analyzed by the optical activity of the mixt. The HCl salts of the main cinchona alkaloids are sol. in CHCl₃. The di-HCl salts of MeO-contg. alkaloids are sol. in CHCl₃ and in the presence of H₂O form viscous solvates, insol. in excess CHCl₃; other Cl-contg. solvents also give similar solvates. G. M. Kosolapoff

PAVLOV, M.S., inzh.; BELOUS, V.G.; ZELIK, V.I.

Auxiliary conveying along horizontal and inclined workings in hydraulic mines. Ugol' 39 no.9:46-48 '64. (MIRA 17:10)

1. Donetskii nauchno-issledovatel'skiy ugol'nyy institut (for Pavlov).
2. Ukrainskiy nauchno-issledovatel'skiy institut gidrodobychi uglya (for Belous).
3. Gidrorudnik "Pioner" (for Zelik).

PROCESSING AND PROPERTIES NOTES

ALITING as a process for increasing the stability of iron

toward heat. I. S. Zolikhovskii. *Sudstroenie* 8, 114-16 (1938); *Chem. Zentr.*, 1938, II, 3854.—The aliting of Fe pipes as carried out in the Stalin steelmills consists of heating the pipes for 22 hrs. at 950° in a powder compound of 40% Al₂O₃, 40% of an Fe-Al mixt., (60% Al and 40% Fe), and 2% NH₄Cl. The depth of the alited layer is about 0.5-0.7 mm. The aliting causes a certain reduction in the strength and the toughness of the Fe, which is greater the longer the treatment is continued. After a normalizing treatment of the alited pipes at 850 (900)° they show sufficiently high values of strength and toughness. The layer enriched with Al undergoes deformation less readily than the original Fe. For this reason bending of the pipes should be done before they are alited. M. G. Moore

Sponge iron. E. P. Barrett. *Steel* 105, No. 18, 48-52 (1939).—An oil-fired rotary kiln capable of producing 1 ton of sponge Fe per day from a charge consisting of a 5:3 mixt. of finely ground ore and coal is described. The best results were obtained by working the kiln at 950°. H. C. P. A.

ZELIKMAN, G.A., mayor meditsinskoy sluzhby

Adaptation for the bacteriologist's table. Voen.-med.shur.
no.6:92 Je '59. (MIRA 12:9)
(BACTERIOLOGICAL LABORATORIES--EQUIPMENT AND SUPPLIES)

17

pa

PROCESSES AND PREPARATIONS INDEX

Compounds for heart treatments. I. N. Zelikin. *Farm. Zhur.* 11, No. 1, 38-8 (1938).—A review of some domestic and imported compounds such as cyclopentamethylenetetrazole (metazola), coramine, catechol, ephedrine, sympathol, ouabain, chlorophyllin and threuminal. I. N.

450-554 RETAILING LITERATURE CLASSIFICATION

ZELIKIN, I. Yu.

ZELIKIN, I. Yu.

Interpeduncular canalliculi and its embryonic development in man.
Trudy Gos. inst. oo izuch. mozga 16:143-158 '49. (MIRA 10:9)
(BRAIN)

ZELIKIN, I.Yu.

Cerebellifugal processes of the cerebellum in dogs. Trudy fiziol.
inst. 4:125-138 '49. (MLA 9:5)
(CEREBELLUM)

ZELIKIN, I. Yu.

Zelikin, I. Yu. - "The dog's brain deprived of one hemisphere.
(On the question of the connections in the cerebral cortex),"
Trudy Fiziol. in-ta im. Pavlova, Vol. III, 1949, p. 107-22 --
Bibliogr: p. 122

SO: U-3566, 15 March '53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

ZELIKIN, I. Yu.

37250. K metodike registratsii razmerov razlichnykh obrazovaniy, snyatykh na mikrofotoyemke ili arisovannykh s mikroskopa. Zhurnal obshchey biologii, 1949, No. 6, s. 420-24

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

ZELIKIN, I. YU.

"Contribution to the methods of estimating the size of various structures by
microphotographs or the camera lucida."
by Zelikin, I. Yu. (p. 480)

SO: Journal of General Biology (Zhurnal Obshchei Biologii) Vol. X, No. 6, 1949

ZELIKIN, I. Yu. (Co-author)

See: PINES, L. Ya.

Pines, L. Ya. and Zelikin, I. Yu. - "Question of the connections in the cerebellum of the dog," Trudy Fiziol. in-ta im. Pavlova, Vol. III, 1949, p. 88-100 -- Bibliog: p. 100

SO: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

ZELIKIN, I. Yu.

Mbr., Inst. Evolutionary Physiology & Pathology Higher Nervous Activity im.

I.P. Pavlov, Dept. Medico-Biol. Sci., Acad. Med. Sci., -1949-. Mbr., Chair

Physiology, Mil. Med. Acad. im. Kirov, -1949-; Mbr., Physiology Lab., Sci.

Res. Inst. im. P. N. Lesgaft, -1949. "Regulating the Function of the Spinal Chord:

III. Role of the Various Parts of a Frog's Brain in the Regulation of the

Function of the Spinal Chord under the Influence of Adrenalin, Iochimbine, Alcohol,

& Chloral Hydrate," Fiziol. Zhur. SSSR, 35, No. 3, 1949.

ZELIKIN, M.B.; MITKEVICH, E.M.; NENNO, E.S.; OVECHKIN, Ye.K.; PANOV, V.I.;
RYDNIK, V.L.; TABUNSECHIKOV, N.P.; RATMANSKIY, N.S., red.; ZAZUL'-
SKAYA, V.F., tekhn.red.

[Production of soda ash] Proizvodstvo kal'tsinirovannoi sody.
Pod red. M.B.Zelikina. Moskva, Gos.nauchno-tekhn.izd-vo khim.
lit-ry, 1959. 421 p. (MIRA 13:5)
(Sodium carbonate)

ZELIKIN, M.B., kand. tekhn. nauk; VISHNEVSKIY, A.N., kand. tekhn. nauk;
Prinimali uchastiye: PANFILOVA, M.L., mladshiy nauchnyy sotrudnik;
SYTNIK, L.V., mladshiy nauchnyy sotrudnik; KAMENSKAYA, N.P., mlad-
shiy nauchnyy sotrudnik; MAYSTRENKO, G.S., mladshiy nauchnyy so-
trudnik

Preparation of silica white using liquors from the soda manufacture.
[Trudy] NIOKHIM 15:3-11 '63. (MIRA 18:2)

ZELIKIN, M.B., kand. tekhn. nauk; MIKHILINA, O.G.

Preparation of a high-quality adsorbent for the clarification of
a polyethylene glycol solution. [Trudy] NIIOKHIM 15:76-82 '63.
(MIRA 18:2)

ZELIKIN, M.B., kand. tekhn. nauk; SYTNIK, L.V.; KAMENSKAYA, N.P.

Preparation of silica white by the action of hydrogen chloride on a sodium silicate solution. Report No.1. [Trudy] NIIOKHIM 15: 12-18 '63.

Determination of the specific surface of silica white based on the adsorption of a dye. Ibid.:97-100

(MIRA 18:2)

18

co

Briquets of dry calcined soda or of soda-containing washing powders. M. B. Zelikin. Russ. 23,949, Jan. 31, 1934. The briquets are formed under pressure and immersed in, or sprinkled with, water to produce a strong spongy crust on them.

ASTM-SUA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964310006-1

¹
SELIKIN, Meyer Beypusovich; RATHANSKIY, N.S., red.; ZAZUL'SKAYA, V.F.,
tekhn. red.

[Manufacture of caustic soda by chemical processes] Proizvodstvo
kausticheskoi sody khimicheskimi sposobami. Moskva, Gos. nauchno-
tekhn. izd-vo khim. lit-ry, 1961. 231 p. (MIRA 14:8)
(Sodium hydroxide)

ZELIKIN, M. I.

Dissertation defended for the degree of Candidate of Physicomathematical Sciences at the Mathematical Institute imeni V.A. Steklova 1962:

"Invariant Curves of Almost Identical Reflections."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

16(1)

AUTHOR: Zelikin, M.I.

SOV/155-58-2-7/47

TITLE: On the Invariant Curves of the Mapping $x^* = x + \varepsilon Y(x) + \varepsilon Z(x, \varepsilon)$
(Ob invariantakh krivyykh otobrazheniya $x^* = x + \varepsilon Y(x) + \varepsilon Z(x, \varepsilon)$)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1958, Nr 2, pp 28-36 (USSR)

ABSTRACT: The n-dimensional space $X = (x^1, x^2, \dots, x^n)$ is mapped onto itself according to the formula

$$(1) \quad x^* = x + \varepsilon Y(x) + \varepsilon Z(x, \varepsilon),$$

where $Y(x)$, $Z(x, \varepsilon)$ are functions two times continuously differentiable with respect to X , and $Z(x, \varepsilon) \rightarrow 0$ for $\varepsilon \rightarrow 0$. Let the system

$$(2) \quad \dot{y} = Y(y), \quad y = (y^1, y^2, \dots, y^n)$$

have the non-degenerated periodic solution

$$(3) \quad y = y_0(t).$$

"Non-degenerated" means here that the equation in the variations

$$(4) \quad \frac{d\delta y}{dt} = Y'_y(y_0(t))\delta y$$

has only one characteristic root equal to 1. Let s roots be < 1 with respect to the absolute value, and $n-s-1$ roots > 1 with

Card 1/2

On the Invariant Curves of the Mapping $x^* = x + \varepsilon Y(y) + \varepsilon^2 Z(x, y)$ SOV/155-58-2-7/47

respect to the absolute value.

Under these assumptions it is proved: The mapping (1) has an immovable curve lying in the neighborhood of (3) and for $\varepsilon \rightarrow 0$ it tends to this limit cycle. The curve is the intersection of two manifolds invariant with respect to the mapping (1) with the dimensions $s+1$ and $n-s$. For an iteration of (1) the points of the first manifold approach the immovable curve, while the points of the second manifold remove from it.

From this theorem, as a conclusion there results a well-known result of Bogolyubov (if an auxiliary system has a limit cycle, then the integral curves of the initial system fill a torus). The paper was written under the guidance of L.S. Pontryagin. There are 2 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: December 25, 1957

Card 2/2

L 06555-67 ET(c) EWP(1) IJP(c)
ACC NR: AP6028013

SOURCE CODE: UR/0042/66/021/004/0272/0274

AUTHOR: Zelikin, M. I.

ORG: none

TITLE: On one differential game

SOURCE: Uspekhi matematicheskikh nauk, v. 21, no. 4, 1966, 272-274

TOPIC TAGS: pursuit problem, differential game theory, *GAME THEORY*,
OPERATIONS RESEARCH

ABSTRACT: The article is closely related to L. S. Pontryagin's article [Uspekhi matematicheskikh nauk, v. 21, no. 4, 1966, 219-272] in which the pursuit problem was analyzed as a problem of the theory of differential games. L. S. Pontryagin established nine conditions to be imposed upon differential games in order to complete the game. Some of these conditions can be removed. L. S. Pontryagin has proved that a differential game can be completed when only conditions 1, 2, 3, 4, 6, 8, 9 or 1, 2, 3, 4, 5, 7, 9 are satisfied. The author of this article presents an example of a differential game where conditions 2-9 are satisfied, but the first one is not satisfied. It is shown that the basic results and methods derived by L. S. Pontryagin are not applicable for such a differential game. Orig. art. has: 1 figure and 5 formulas. [LK]

SUB CODE: /2 / SUBM DATE: 03Apr66/ ORIG REF: 003/ OTH REF: 001/
Card 1/1

Zelikin, M.L.

105-9-1/32

AUTHORS

Nekrasov A.M., Engineer, Groys Ye.S., Engineer, Zelikin M.L.,
Engineer, Turetskiy V.Ye., Engineer, Man'kin E.A., Candidate of
Technical Sciences.

TITLE

The Transmission System Stalingrad Hydro-Electric Station-Donbass.
(Elektroperedacha postoyannogo toka Stalingradskaya GES-Donbass -
- Russian)

PERIODICAL

Elektrichestvo, 1957, Nr 9, pp 1 - 10 (U.S.S.R.)

ABSTRACT

The line still under construction will connect the Southern energy system with the Stalingrad hydro-electric station. In the case of a flood the energy will be transferred from Stalingrad to the Donbass and during seasonal fluctuations on the Wolga it will be arranged the reverse direction. The nominally fixed power is 750 MW. Four billion kW will be transferred in both directions yearly. The length of line is 470 km, the voltage is 800 kV. The operation- and experimental results of the d.c. line Kashira-Moscow were of great importance for projecting. The design and operation of the power line is given. It is an eight-bridge scheme with earthing of the center of the d.c. part. The average rectified voltage of each bridge is 100 kV. Single-phase transformers of 82 MVA were selected for this purpose. A net-speed-control is planned as well as shunt-valves for the liquidation of operational breakdowns. The change of direction of the energy transmission is arranged by means of a net-control and without any switching in the main system. The description of the insulation as well as of the overvoltage protection, the

Card 1/2

The Transmission System Stalingrad- Hydro-Electric Station
-Donbass.

105-9-1/32

basic equipment of the transformer substations, their arrangement and the power line itself, which is constructed as open-air transmission-line, is given. Finally the technical economic indices as well as a comparison with an alternating line are given. The d.c. line is cheaper by almost 30% and has losses which are 2,5 times lower. The Stalingrad-Donbass line costs 0,9 Kop. per 1 kWh. The technical economic indices are practically the same in both cases. There are 4 tables, 10 illustrations and 9 Slavic references.

ASSOCIATION Technical Direction of MES.-Scientific Research Institute for Direct-Current.- Moscow Transformer Factory.
(Tekhnicheskoye upravleniye MES.- Nauchnoissledovatel'skiy institut postoyannogo toka.- Teploelektroproyekt.-Moskovskiy transformatornyy zavod.)

SUBMITTED January 18, 1957
AVAILABLE Library of Congress.
Card 2/2

~~ZELINKIN, P.P.~~
NEKRASOV, A.M., inzhener; GROYS, Ye.S., inzhener; ZHLIKIN, N.I., inzhener;
TURETSKIY, V.Ye., inzhener; MAN'KIN, E.A., kandidat tekhnicheskikh
nauk.

Transmission of d.c. power from the Stalingrad hydroelectric
power station to the Donets Basin. Elektichestvo no.9:1-10
S. '57. (MLR 10:8)

1. Tekhnicheskoye upravleniye Ministerstva elektrostantsiy (for Nekrasov)
2. Nauchno-issledovatel'skiy institut postoyannogo toka (for Groys)
3. Teploelektroproyekt (for Zelinkin and Turetskiy)
4. Moskovskiy transformatornyy zavod (for Man'kin).
(Stalingrad hydroelectric power station)

DAIMATS'KA, Ye.I. [Dalmats'ka, IE.I.]; ZELIKIN, M.B.

Preparation of granulated active aluminum oxide. Khim prom.
[Ukr.] no.1:24-28 Ja-Mr '63 (MIRA 17:7)

ZELIKIN, M.B.; KAZNACHEYEVA, V.V.; NIKITENKO, L.I.; TIKHOMIROVA, I.D.

Filter materials used in the manufacture of "nitron" fibers.
Khim. volok. no.4:10-11 '65. (MIRA 18:8)

1. Nauchno-issledovatel'skiy institut osnovnoy khimii, Khar'kov.

ZELIKIN, M.I.; TINYANSKIY, N.T.

Determinable differential games. Usp. mat. nauk. 20 no.4:151-157
Jl-Ag '65. (MIRA 18:8)

ZELIKIN, M. V.

~~ZELIKIN, M. V.~~, kandidat tekhnicheskikh nauk; TYUTYUNNIKOV, A. B., kandidat tekhnicheskikh nauk.

Testing of bubbling apparatus by means of models. Khim.prom.
no.4:231-235 Je '57. (MIRA 10:9)

1. Nauchno-issledovatel'skiy institut osnovnoy khimii.
(Chemical engineering--Equipment and supplies--Models)

A. S. S.

Chemistry & Physics

Rapid method for the determination of moisture (in brick, etc.). S. I. ZILBERMAN AND M. I. LOROVICH. *Open-pore*, 1940, No. 1, 47-53; *Chem. Zentr.*, 1940, 1, 3837; *Chem. Abs.*, 36, 4083 (1942). --The method suggested is based upon the determination of the dielectric constant of the moist material. The apparatus is described, and a theoretical scheme for the automatic regulation of moisture is given.

PROCESS AND PROPERTIES INDEX

19

A rapid method for the determination of moisture [in brick, etc.]. S. I. Zelikin and M. I. Loprovok. *Otvetnyy* 8, 47-53 (Jan.-Feb., 1940); *Chem. Zentr.* 1940, 1, 3837.—The method suggested is based upon the detn. of the dielec. const. of the moist material. The app. is described and a theoretical scheme for the automatic regulation of moisture is given. M. O. Moore

ALM-35A METALLURGICAL LITERATURE CLASSIFICATION

CLASS	AL	AM	AN	AO	AP	AR	AS	AT	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	JM	JN	JO	JP	JQ	JR	JS	JT	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZV	ZW	ZX	ZY	ZZ
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L 11,625-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) LJP(c) JD/JG

ACC NR: AP5025305

SOURCE CODE: UR/0051/65/019/004/0611/0615

AUTHOR: Berdnikov, S. L.; Zelikin, Ya. M.

ORG: none

TITLE: Effect of vanadium pentoxide impurity on the luminescence of zinc oxide

SOURCE: Optika i spektroskopiya, v. 19, no. 4, 1965, 611-615

TOPIC TAGS: zinc compound, vanadium compound, zinc oxide, luminescence spectrum, excitation spectrum, vanadium pentoxide

ABSTRACT: Comparison of the luminescence and excitation spectra of ZnO containing 1 mole % V_2O_5 revealed the following: (1) The short-wave region of the luminescence spectrum is much less extensive than in ZnO samples containing intensifiers such as Al and Cd; (2) After firing at 10^{-5} mm Hg at 900C, the yellow luminescence band disappears from the spectra of pure ZnO and ZnO containing intensifiers, but is retained in the spectrum of ZnO containing V_2O_5 ; (3) The excitation spectrum of ZnO containing V_2O_5 differs sharply from that of pure ZnO and ZnO with intensifiers. It is postulated that these features are due to the fact that the luminescence observed is caused by a compound of zinc oxide and vanadium oxide. The identity of the luminescence and excitation

Card 1/2

UDC: 535.37

L 14625-66

ACC NR: AP5025305

6
spectra of $\text{ZnO} \cdot 1 \text{ mole } \% \text{V}_2\text{O}_5$ and zinc orthovanadate and at the same time the substantial difference in the stability of their luminescence relative to roasting in air, vacuum, and hydrogen are consistent with the hypothesis that in $\text{ZnO} \cdot 1 \text{ mole } \% \text{V}_2\text{O}_5$ the luminescence is due to a microphase of zinc orthovanadate, which, being combined with the crystal lattice of zinc oxide, is more stable than zinc orthovanadate alone. This activation of the base by a microphase of the compound formed between the base and the activator occurs in all probability in other phosphors as well. Orig. art. has: 6 figures and 1 table.

SUB CODE: 07, 20 / SUBM DATE: 28Jul64 / ORIG REF: 004

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73.9%

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that the "highest" temperature is related to the altitude

ASSOCIATION: NONE

SUBMITTED: 01Aug64

Card

ZELIKIN, Ya.M.; PARACHEVA, G.T.

Characteristics of the thermoluminescence of zinc oxide.
Opt. i spektr. 13 no.4:554-557 0 '62. (MIRA 16:3)
(Luminescence) (Zinc oxide)

ZELIKIN, Ya.M.

Preparation and properties of sublimated layers of luminescent
zinc oxide and zinc sulfide. Prib. i tekhn. eksp. 7 no.2:130-
132 Mr-Ap '62. (MIRA 15:5)

1. Leningradskiy gosudarstvennyy universitet.
(Luminescent substances)

ACCESSION NR: EWT(1) IJP(o) AP5017332

AUTHOR: Vilesov, F. I.; Zagrubskiy, A. A.; Zelikin, Ia. H. 44, 55

TITLE: Excitation of fluorescence of zinc oxide by "hot" photoelectrons generated by vacuum ultraviolet radiation 44, 55

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 2232-2234

TOPIC TAGS: zinc oxide, fluorescence, uv radiation, electron bombardment, photoelectron 44, 55

ABSTRACT: This is a continuation of earlier investigations in the 1600--1000 Å range (DAN SSSR v. 141, 1068, 1961), but extended to the 4000--6500 (3.0--14.5 ev) range. The purpose of the investigation was to identify the mechanism responsible for the decrease in the kinetic energy of the primary photoelectrons. The samples investigated were dense polycrystalline sublimated layers of zinc oxide prepared by a method described earlier (PTE no. 2, 130, 1962). The excitation spectra consist of three peaks at photon excitation energies 3.5 ± 0.2 , 7.5 ± 0.2 , and 10.8 ± 0.2 ev, and 3 minima at 6.4 ± 0.2 , 9.4 ± 0.2 , and 12.8 ± 0.2 ev. The main feature of this spectrum is the fact that the peaks are equidistant, with the energy difference equal to the width of the forbidden band (3.2 ev). Such a spectrum can

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44-66
ACCESSION NR:

AP5017332

be attributed to impact ionization of the valence electrons in the conduction band by the primary electrons which have sufficient kinetic energy. The results indicate also that the quantum yield of the fluorescence of the zinc oxide is increased by the impact ionization of the valence electrons when excited with vacuum ultraviolet. This agrees with the universally accepted opinion that the effective mass of the hole in zinc oxide is much larger than the effective mass of the electron. Orig. art. has: 1 figure.

ASSOCIATION:

Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: 15Feb65

NR REF 807: -008

ENCL: 00

OTHER: 001

SUB CITE: SS, OP

Card 2/2 DP